

Major: Mathematics, B.S. - Secondary Teacher Prep/Pure Mathematics Subplan/Option:
120 units
2018-2019 Academic Year

Year 1	Fall		Units	Spring		Units	Comments
	Courses	Requirements/Comments		Courses	Requirements/Comments		
	MAT 1140 Calculus I (B4)	Prereq: C or better in MAT 1050 and MAT 1060, or appropriate score on MDTP or ALEKS placement test.	4	MAT 1150 Calculus II (B4)	Prereq: MAT 1140, MAT 115B, MAT 1140C, AP Calc AB ≥ 3 , or AP Calc BC ≥ 3 .	4	
GE Area A2: Written Communication		3	PHY 1510 Introduction to Newtonian Mechanics (B1)	Prereq: C- or better in MAT 114 or MAT 1140. Coreq: PHY 1510L.	3		
GE Area A1: Oral Communication		3	PHY 1510L Newtonian Mechanics Laboratory (B3)		1		
GE Area A3: Critical Thinking		3	BIO 1210 Foundations of Biology: Energy, Matter, and Information (B2)		3		
GE Area E: Lifelong Learning and Self-Development		3	BIO 1210L Foundations of Biology: Energy, Matter, and Information Laboratory (B3)		1		
		0	GE Area C2a: Philosophy and Civilization		3		
		0			0		
		0			0		
Total Units			16	Total Units		15	

	Fall		Units	Spring		Units	Comments
	Courses	Requirements/Comments		Courses	Requirements/Comments		
Year 2	MAT 2140 Calculus III	Prereq: MAT 116, MAT 214, MAT 1150, or MAT 1150C.	4	MAT 3100 Introduction to Mathematical Proof	Prereq: MAT 116 or MAT 1150.	4	
	STA 2100 Introduction to Statistics	Prereq: AP Calc AB, AP Calc B, MAT 114, MAT 1140, MAT 120, MAT 1200, MAT 130, MAT 1300, MAT 115, MAT 1150, MAT 116, MAT 214, MAT 2140, or MAT 215.	4	STA 2200 Introduction to Probability	Prereq: STA 2100.	3	
	Major Core	PHY 1520/L or BIO 1220/L	4	MAT 2250 Linear Algebra with Applications to Differential Equations	Prereq: MAT 116 or MAT 1150.	4	
	GE Area C2b: Literature and Language Other than English		3	GE Area D1: U.S. History American Ideals		3	
			0			0	
			0			0	
			0			0	
			0			0	
			0			0	
		Semester Total Units	15		Semester Total Units	14	

	Fall		Units	Spring		Units	Comments		
	Courses	Requirements/Comments		Courses	Requirements/Comments				
Year 3	MAT 2010 Introduction to Computational Methods in Mathematics	Prereq: MAT 116 or MAT 1150. Coreq: MAT 2010L.	2	MAT 4170 Introduction to Abstract Algebra I	Prereq: MAT 310 or MAT 3100.	4	<i>Graduation Writing Test must be taken before completion of 75 units.</i>		
	MAT 2010L Introduction to Computational Methods in Mathematics Laboratory		1	Option Elective	Select from Curriculum Sheet	4			
	MAT 4190 Advanced Linear Algebra	Prereq: MAT 208 or MAT 2250; and MAT 310 or MAT 3100.	4	GE Area D3: Social Sciences: Principles, Methodologies, Value Systems, and Ethics		3			
	GE Area D2: U.S. Constitution and California Government		3	GE Area C3: Arts and Humanities Synthesis		3			
	GE Area C1: Visual and Performing Arts		3			0			
	Unrestricted Elective		3			0			
			0			0			
			0			0			
	<i>Take the Graduation Writing Test</i>								
	Semester Total Units			16	Semester Total Units			14	

Year 4	Fall		Units	Spring		Units	Comments
	Courses	Requirements/Comments		Courses	Requirements/Comments		
	MAT 3140 Introduction to Real Analysis I	Prereq: MAT 310 or MAT 3100; and MAT 215 or MAT 2140.	4	MAT 4280 Functions of a Complex Variable	Prereq: MAT 3140 and MAT 2140; MAT 314 and MAT 2140; MAT 3140 and MAT 215; or MAT 314 and MAT 215.	4	
Option Elective	Select from Curriculum Sheet	4	Option Elective	Select from Curriculum Sheet	4		
Option Elective	Select from Curriculum Sheet	4	GE Area D4: Social Science Synthesis		3		
GE Area B5: Science and Technology Synthesis		3	Unrestricted Elective		4		
		0			0		
		0			0		
		0			0		
		0			0		
<i>File an application to graduate</i>							
Semester Total Units		15	Semester Total Units		15		
Total Units					120		